

UvA-DARE (Digital Academic Repository)

Forces that control endothelial adhesion in angiogenesis

van der Stoel, M.M.

Publication date
2021

[Link to publication](#)

Citation for published version (APA):

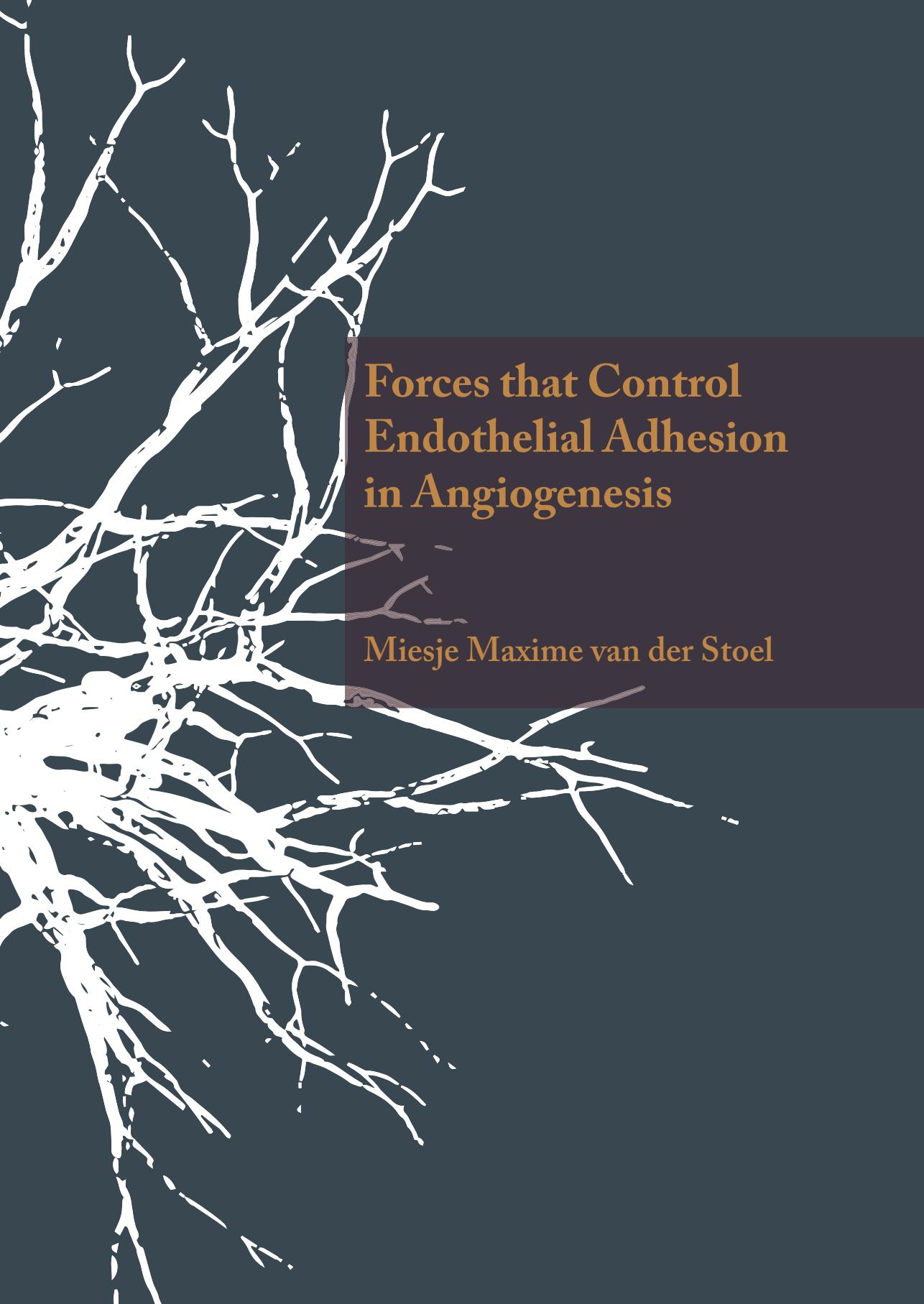
van der Stoel, M. M. (2021). *Forces that control endothelial adhesion in angiogenesis*. [Thesis, fully internal, Universiteit van Amsterdam].

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.



Forces that Control Endothelial Adhesion in Angiogenesis

Miesje Maxime van der Stoel

Forces that Control Endothelial Adhesion in Angiogenesis

Miesje Maxime van der Stoel

Forces that Control Endothelial Adhesion in Angiogenesis
Miesje Maxime van der Stoel

Doctoral Thesis, University of Amsterdam, Amsterdam, The Netherlands

ISBN: 9789464232547

Design: Miesje M. van der Stoel

This is not a sprout

Printed By: Proefschriftmaken.nl

Copyright © Miesje M. van der Stoel

All rights reserved. No part of this thesis may be reproduced, stored in a retrieval system or transmitted in any way or any means without prior permission of the author.

Financial support by the Dutch Heart Foundation for the publication of this thesis is gratefully acknowledged.

Forces that Control Endothelial Adhesion in Angiogenesis

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Universiteit van Amsterdam
op gezag van de Rector Magnificus
prof. dr. ir. K.I.J. Maex

ten overstaan van een door het College voor Promoties ingestelde commissie,
in het openbaar te verdedigen in de Agnietenkapel
op woensdag 9 juni 2021, te 13.00 uur

door Miesje Maxime van der Stoel
geboren te 's-Gravenhage

Promotie commissie

<i>Promotores:</i>	dr. S. Huvveneers prof. dr. C.J.M. de Vries	AMC-UVA AMC-UVA
<i>Copromotor:</i>	prof. dr. N. Zelcer	AMC-UVA
<i>Overige leden:</i>	prof. dr. E. Lutgens prof. dr. V.M. Christoffels prof. dr. E.A.J. Reits prof. dr. H.E. de Vries dr. J. de Rooij	AMC-UVA AMC-UVA AMC-UVA Vrije Universiteit Amsterdam UMC Utrecht

Faculteit der Geneeskunde

Table of Contents

Chapter 1	General Introduction	9
Chapter 2	Endothelial YAP/TAZ Signaling in Angiogenesis and Tumor Vasculature <i>Published in Frontiers in Oncology, 2021</i>	25
Chapter 3	DLC1 is a Direct Target of Activated YAP/TAZ that drives Collective Migration and Sprouting Angiogenesis <i>Published in Journal of Cell Science, 2020</i>	61
Chapter 4	The Rho GAP DLC1 acts as a Negative Feedback Sensor for YAP in Angiogenic Sprouting <i>Manuscript in Preparation</i>	89
Chapter 5	Vinculin Controls Endothelial Cell Junction Dynamics during Vascular Lumen Formation <i>Submitted Manuscript</i>	111
Chapter 6	Vinculin Strengthens the Endothelial Barrier during Vascular Development <i>Manuscript in Preparation</i>	139
Chapter 7	The MARCH6-SQLE Axis Controls Endothelial Cholesterol Homeostasis and Angiogenic Sprouting <i>Published in Cell Reports, 2020</i>	159
Chapter 8	General Discussion	185
Appendices	Summary	204
	Samenvatting	205
	Author Contributions	206
	List of Publications	208
	PhD Portfolio	209
	Curriculum Vitae	211
	Acknowledgements	212